

LONG ISLAND BOTANICAL SOCIETY NEWSLETTER

March - April 1992 Vol. 2, No. 2

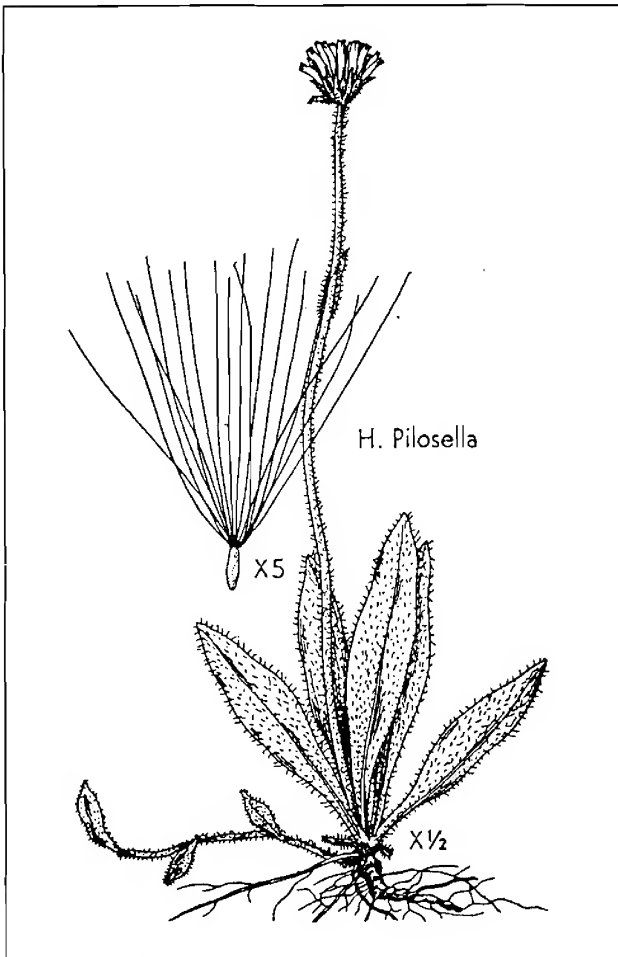
HAWKWEEDS FOR HAWKEYES

The hawkweeds are a large group of herbs that superficially resemble dandelions. Hawkweeds comprise the genus *Hieracium*, a name derived from the Greek *hierax*, meaning *a hawk*; the ancients, as recorded by Pliny (killed by the eruption of Vesuvius in 79 A.D.) and others, thought that hawks used the plant to strengthen their eyesight.

The late Professor Fernald, former director of the Gray Herbarium at Harvard University, had this to say about the hawkweeds: "The genus, especially in Europe, [is] broken by technical specialists, with eyesight stimulated beyond that of the ancient hawks, into thousands of so-called species, subspecies, varieties, and forms..." (Fernald, 1950, p. 1562).

In 1921 the German botanist Karl Zahn (1865-1940) published a 1700 page treatment on the genus *Hieracium*. In the treatment, Zahn recognized 624 subspecies of *Hieracium pilosella* L., a common hawkweed on Long Island.

In North America, there are about 60 species of hawkweed recognized by most taxonomists (Kartesz & Kartesz, 1980). In northeastern United States, Cronquist (Gleason & Cronquist, 1991) recognized 18 species of hawkweed; 10 native species and 8 non-native species introduced from Europe. In New York State, Mitchell (1986) recognized 14 species, with 9 species occurring on Long Island (NYFA, 1990). On a 1 acre lawn in England, European taxonomists may recognize over 100 species of *Hieracium*.--Eric Lamont



Hieracium pilosella L., a common hawkweed on Long Island. (from New Britton & Brown Ill. Fl., with permission of NY Bot. Gard.).

PROGRAMS

March 10, 1992 - 7:30 pm, Dr. Valrie Gerard,
"Seaweeds of Long Island", Museum of L.I.
Natural Sciences, E.S.S. Bldg., SUNY at
Stony Brook.

April 14, 1992 - 7:30 pm, Dr. Alice Belling,
"Plants of Hazardous Waste Sites", Uplands
Farm Nature Center, Cold Spring Harbor.

- Fernald, M. L. 1950. Gray's Manual of Botany. Van Nostrand Co., New York. 1632 pp.
- Gleason, H. A. & A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. New York Botanical Garden, NY. 910 pp.
- Kartesz, J. T. & R. Kartesz. 1980. A Synonymized Checklist of the Vascular Flora of the United States, Canada and Greenland. Univ. of North Carolina Press, Chapel Hill. 498 pp.
- Mitchell, R. S. 1986. A Checklist of New York State Plants. New York State Museum Bull. 458: 1-272.
- New York Flora Association. 1990. Preliminary Vouchered Atlas of New York State Flora.

SUFFOLK COUNTY PARKS

One of the hallmark accomplishments of Suffolk County government has been its longstanding support for natural resource protection through acquisition of open space.

To date, the Suffolk County Park system contains nearly 30,000 acres with parks ranging in size from 1/4 acre to 2,600 acres and stretching from the County line in the west to Orient and Montauk Points in the east.

This article will focus on one particular initiative of Suffolk County open space preservation - the 1986 Open Space Program.

Overwhelmingly supported by the Suffolk County Legislative and Executive branches and the environmental community (the support by those botanically inclined was vital), the 1986 Open Space Program was a \$60 million bond issued by the County to acquire approximately 4,600 acres of additional parkland at 28 separate sites. The program is nearly complete with Robin's Island (ever the controversial) remaining as the only outstanding project.

Following is a brief description of some of the projects completed under this landmark acquisition program.

1) Cordwood Landing County Nature Preserve - a 60 acre north shore hardwood forest containing oak, hickory, hop hornbeam, a population of common polypody, and an interesting population of salt/wind pruned beech on the cliff overlooking L.I. Sound.

2) Birch Creek/Owl Pond/Maple Swamp - an area encompassing about 1,400 acres in the eastern reaches of the Suffolk County Pine Barrens. Vegetation includes "classic" Pine Barrens, (e.g. Pitch pine-scrub oak) Pitch pine-heathland community, pine-oak barrens, Atlantic white cedar wetlands, maple/tupelo wetlands, open water-pond shore communities.

3) Terrel's River - a 260 acre parcel in East Moriches along the west bank of Terrel's River. Property containing "south shore oak belt" vegetation, tidal wetlands and beach vegetation.

4) Dwarf Pine Plains - 600± acres of the globally rare Dwarf Pine Plains, predominantly in the southwest quadrant.

5) Fresh Pond Greenbelt - 30 acres of open water and red maple swamp in Ft. Salonga.

6) Orient Point - 48 acres at the tip of the lesser known of the two forks. This was agricultural land but is now reverting to shrubland dominated by bayberry.

7) Swan Pond/Calverton Ponds - 600 acres of coastal plain pond shores, abandoned cranberry bogs, open water, and upland pine barrens forests. Contains

one of the greatest concentrations of rare plants in New York State.

Other areas where the County has acquired land are the headwaters of the Carll's River (north of Belmont Lake State Park), the South Setauket Pine Barrens, several hundred acres at Hither Woods on the Montauk peninsula, a 20 acre addition to San Souci County Nature Preserve in Sayville, and several parcels in the Long Pond Greenbelt in eastern Southampton.

These properties, and the others in the program would not have been acquired were it not for the vocal and active support of people and organizations interested in open space preservation. It underscores the need for botanists and other individuals with natural resource expertise to be and stay involved in open space issues.--John Turner

BOTANISTS, OTHER SCIENTISTS TO BE CUT FROM STATE BUDGET

We recently received word that New York State's proposed budget includes elimination of 21 of 30 positions in the New York State Museum's Science Service (NYS Education Department). Any of us familiar with the publications of the New York State Museum, such as Richard S. Mitchell's *A Checklist of New York State Plants*, have witnessed but a fraction of the important scientific work undertaken by Museum Science Service staff each year. The Museum's researchers undertake or assist many botanical, zoological, geological and other investigations around the State, and are constantly adding to the base of knowledge regarding New York's natural history. Dr. Gordon Tucker, for example, is conducting an ecological study of a drinking water supply watershed on Fishers Island for the Suffolk County Department of Health Services, and is expanding this work to include a more complete floral inventory of the entire island for the NYS Museum.

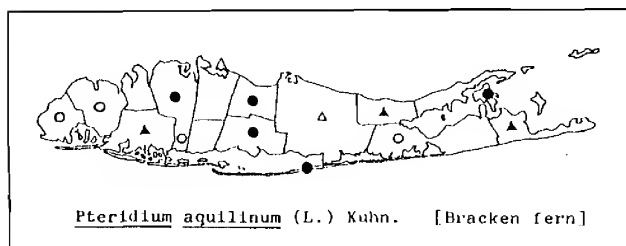
To express your feelings about this impending loss of critical personnel, write to your State Assemblyman or State Senator as soon as possible.--Louise Harrison

CLARK GARDEN NEEDS VOLUNTEERS

The Clark Garden is looking for volunteers to present walks, talks, lectures, workshops or tours of their gardens. If you are interested call Kim A. Asimake at (516) 621-7568.

REPORT OF THE LOCAL FLORA COMMITTEE

The following distribution map is from the preliminary atlas of Long Island's vascular plants. Each record on the map is further documented in a separate data base, with the specific location, collector (or observer), date of collection (or report), and herbarium where a voucher specimen is deposited. It is our goal to eventually document all species occurrences with a post-1980 voucher specimen. Notice that there are no records for common bracken fern from the Townships of Babylon, Huntington, North Hempstead, and Southold; and no voucher specimens from the Townships of East Hampton, Hempstead, and Riverhead. Any LIBS member interested in helping to "fill in the dots," please contact Skip Blanchard, chairman of flora committee.



Key to symbols:

- = a species record based upon a post-1980 voucher specimen.
- = a species record based upon a pre-1980 voucher specimen.
- ▲ = a species record based upon a post-1980 unvouchered report.
- △ = a species record based upon a pre-1980 unvouchered report.

FLORA OF ORIENT BEACH STATE PARK

The vascular flora of Orient Beach State Park, by Eric Lamont and Richard Stalter, has just been published by the Torrey Botanical Club. The current flora is compared with a 1934 flora published by Roy Latham, and natural plant communities of the park are described and discussed. For reprints contact Eric Lamont: 586-H Sound Shore Road, Riverhead, NY 11901 (516-722-5542).

LIBS FIELD TRIPS

Tired of the winter doldrums? Only so many hours can be spent in one's den, looking over that new Gleason & Cronquist manual, or going over last years field notes before cabin fever sets in. The 1992 Field Season is almost upon us! A schedule of 12 trips taking us to a variety of places on Long Island and upstate New York are in the planning.-Al Lindberg

The Field Trip Season begins on:

5 April 92 - Welwyn Preserve, this trip will be led by Lois and Al Lindberg. Meet at the Welwyn parking lot at 9:30 am, bring lunch; we may visit another preserve in the afternoon. Directions: Take L.I.E. Exit 41 North, following Rte. 107 into Glen Cove. Turn right onto Brewster St. at the firehouse and go 4 traffic lights. Make a left turn at the 4th light, and take Dosoris La. for 5 blocks. Turn left onto New Woods Rd and turn right. The Preserve entrance is the next right.

25 April 1992 - Cordwood Forest (Co. Park), Miller Place, Suffolk Co., with possible trip to Weld Preserve, village of Nissequogue. Meet at Co. Park entrance located on Harbor Beach Rd., off North Country Rd. (just beyond village), 9:45 A.M.

Smoky Mountains Trip

24-26 April 1992 - So far six members are 99% committed to attend the Spring Wildflower Pilgrimage in the Smoky Mountains of Tennessee. Individuals will make their own arrangements for travel and lodging. For more information call Eric or Mary Laura Lamont at 516-722-5542.

Costa Rica Trip Update

As of Feb 11th, 14 people have expressed a desire to participate. Tentative dates are from 2 Jan - 15 Jan 1993, with stops at La Selva, Monteverde, and Guanacaste. At this time our travel agent is awaiting word from OTS (Organization for Tropical Studies) about availability of space for our group at La Selva. The maximum group size is 15 (based on vehicle seating space). We will be keeping a standing list - call Skip or Jane Blanchard (516) 421-5619. Those on the list of participants will be advised of further developments.

RARE PLANTS

The greatest concentration of rare plant species in New York State occurs on the east end of Long Island. The following table summarizes the number of rare plant populations (extant and historical) known from each of L.I.'s east end Townships, as of June, 1991:

Township	Number of Rare Plant Populations
Southampton	203
East Hampton	191
Brookhaven	177
Riverhead	149
Southold	83
Shelter Island	5

Information provided by N.Y. Natural Heritage
Program.-Eric Lamont

SWAMP COTTONWOOD GROVE THREATENED

The Federal Government is considering selling some wildlife refuges across the United States. The Morton Wildlife Refuge (Jessup's Neck, Township of Southampton) may close or be sold because of operating costs and under-use by the public; especially threatening to the Morton Refuge is the most recent flora and fauna inventory (U. S. Department of the Interior, 1974) which lists no rare, threatened, or endangered species on site.

One of the few extant populations of swamp cottonwood (*Populus heterophylla* L.) in New York State occurs in the low wet woods and swamps at the Morton Wildlife Refuge. This population is near the extreme northeastern range limit of the species. Swamp cottonwood occurs from Louisiana and Florida north to southern Connecticut, Rhode Island, and Long Island; the Rhode Island population was only recently discovered (Mehrhoff, personal communication).

If you are concerned about the possible sale of Morton Wildlife Refuge or five other National Wildlife Refuges on Long Island (i.e.: Amagansett, Conscience Point, Oyster Bay, Seatuck, and Target Rock) contact the refuge and ask to be kept informed. We will attempt to keep you informed through this newsletter also.-Eric Lamont

PROGRAMS

March 10, 1992 - 7:30 pm, Dr. Valrie Gerard, "Seaweeds of Long Island," Museum of L.I. Natural Sciences, E.S.S. Bldg., SUNY at Stony Brook.

Dr. Valrie Gerard (Professor, Marine Sciences Center, SUNY at Stony Brook) will talk about the seaweeds of Long Island. Dr. Gerard is an expert on kelps and also conducts research on salt marsh ecology.

April 14, 1992 - 7:30 pm, Dr. Alice Belling, "Plants of Hazardous Waste Sites," Uplands Farm Nature Center, Cold Spring Harbor.

Dr. Alice Belling (Professor, New York University; past-president of the Torrey Botanical Club) has worked for several large environmental consulting firms dealing with hazardous waste sites. In this talk she will discuss the plants that can grow and survive at contaminated areas.

NEW MEMBERS

The Long Island Botanical Society is pleased to welcome the following new members:

Michael Byer, Brooklyn; Dr. Kenneth Erb, Hofstra University, Uniondale; Judith Fitzgerald, New York City; Gary Gentile, Ridge; Mary Kane Hayes, Quogue; Anne Johnson, Lisbon; Bruce Lund, Huntington; Richard Machtay, Huntington; Jim McDougal, Glen Cove; David & Jane Ritchie, Aquebogue; Dr. George Rogers, Clark Botanic Garden, Albertson; Dr. Andrew Senesac, Riverhead; Norman Soule, Cold Spring Harbor; Paul Sullivan, Bayshore; Volunteers for Wildlife, Huntington.

NEW ENGLAND PLANT CONSERVATION SYMPOSIUM

A symposium entitled: "New England Plant Conservation: The Scientific Basis for Effective Action" will be held on March 21, 1992 at Bentley College, Waltham, MA. Topics include: Taxonomic Issues, Setting Priorities, Habitat Management, and Reintroduction. For more information contact: Frances Clark, Conservation Program Officer, at (617) 237-4924 or (508) 877-7630.

THE JOE-PYE WEEDS OF LONG ISLAND

Three species of joe-pye weed can be found on Long Island. All three species are tall, robust herbs (usually 3 to 10 feet tall), with whorled leaves, and purplish flowers.

Eupatorium purpureum L. (purple-node joe-pye weed) usually occurs in dry upland habitats; it is common throughout the rich deciduous woods of Long Island's north shore. The stem is green with a dark purple band at each node (a node is where the leaf joins the stem).

Eupatorium fistulosum Barratt (hollow-stemmed joe-pye weed) usually occurs in wet or moist habitats and is probably the most common species on Long Island. It usually grows more than 6 feet tall, and sometimes surpasses 10 feet in height. The stem is uniformly purple throughout, and is hollow with a large central cavity.

Eupatorium dubium Willd. (three-nerved joe-pye weed) is probably the most difficult species to identify. It is commonly confused with *Eupatorium maculatum* L. (spotted joe-pye weed), a species that it superficially resembles; however, *E. maculatum* does not occur on Long Island. *Eupatorium dubium* has a purple stem with solid pith. The pattern of veins on the leaf is most useful in identifying this species: the lowest pair of lateral veins is more prominent and more prolonged than the others (this condition is known as "tripinerved" leaf venation). All other species of joe-pye weed have pinnately veined leaves (that is, leaves with one principal vein down the middle, and with veinlets running out sideways from it; like the plume of a feather on each side of the shaft).

The rhizome, leaves, and flowers of several species of joe-pye weed have been used for medicinal purposes. Darlington (1837) noted, "Dr. Barton speaks highly of it [*E. purpureum*] as a tonic" and Torrey (1843) claimed, "A decoction of the root [rhizome] is used as a remedy for gravel. The popular name [joe-pye weed] is said to be that of an Indian who recommended it to the whites."

Harned (1931) stated, "This plant [*Eupatorium purpureum*] derived its common name, Joe-Pye Weed, from a New England Indian doctor who gained notoriety in the application of the plant in cases of typhus fever." Durant (1976) stated, "Joe Pye was an Indian known for his special skill as a medicine man who made the rounds of rural New England in the late 1700's. He apparently was specially skilled at reducing fevers. One of the few records of him show that he bought '1 qt rum, 1 s[hilling] 6 p[ence]' at a tavern in Stockbridge, Mass., in 1775, so perhaps he made an elixir as well as

an herb infusion." Although joe-pye weed was of obvious medicinal use it is likely that its relative *Eupatorium perfoliatum* L. (boneset) was more frequently used by the North American Indians for treatment of fevers.

The Chippewa Indians had several uses for *E. maculatum* (Densmore, 1928). Rhizomes collected in autumn were dried, pulverized, boiled, and prepared in the form of a decoction. Sick children would be bathed in the decoction: "if a child is fretful this will make it go to sleep" (Densmore, 1928). Decoctions from the rhizome were also used as a wash for inflammation of the joints and skin. Dried leaves and flowering tops were used to prepare a diaphoretic tea.

Barratt (1841) commented on the economic use of *E. fistulosum*: "The hollow stems of this species have been used extensively for blasting rocks at the Middletown Feldspar Quarry [Connecticut]." By filling the hollow stems with gun powder they could be used as fuses in the quarries.

Most species of joe-pye weed have been cultivated in Europe and deserve greater recognition in North America. Their conspicuous purple flowers and commanding height offer the gardener unique material suitable for different displays. Plants can be propagated from seed and, more commonly, by division of the root stock. *Eupatorium maculatum* was first cultivated in Europe in 1656 (Aiton, 1810), and Lamarck (1786) wrote that *Eupatorium purpureum* was "used in the king's garden." Three species are currently offered for sale by native plant dealers in the United States: *E. fistulosum*, *E. maculatum*, and *E. purpureum*.--Eric Lamont

Aiton, W. 1810. Hort. Kew., ed. 2, vol. 4: 504-509.

Barratt, J. B. *Eupatorium verticillata*; specimens to illustrate

1 folio page privately printed and distributed. Middletown, CT.

Darlington, W. 1837. Fl. cestr. For the author by Simeon Sigfried, West-Chester, Penn.

Densmore, F. 1928. Uses of plants by the Chippewa Indians. Ann. Rept. Bur. Ethn. 44: 275-397.

Durant, M. 1976. Who named the daisy? Who named the rose? Dodd, Mead & Co., NY.

Hamed, J. E. 1931. Wild flowers of the Alleghanies. Published by the Author, Oakdale, MD.

Lamarck, J. B. 1786. Encycl. 2(2): 402-411.

Torrey, J. 1843. Fl. New York. Carrol & Cook Printers, Albany.

WANTED: QUALITY PHOTOGRAPHS

The membership committee is currently preparing a brochure on the L.I. Botanical Society. About 10 color photographs of characteristic L.I. habitats and wildflowers, will be included. The brochure will be professionally printed this summer (1992). If you would like to contribute a photograph for consideration, please contact Eric Lamont at 516-722-5542.

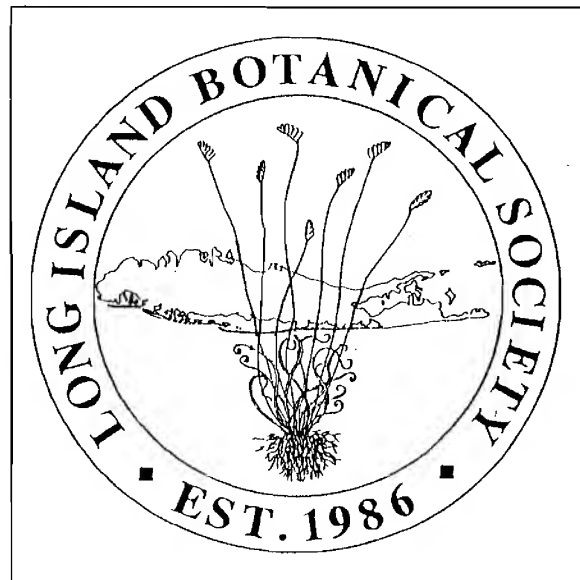
LONG ISLAND BOTANICAL SOCIETY
Founded: 1986; Incorporated: 1989.

The Long Island Botanical Society is dedicated to the promotion of field botany and a greater understanding of the plants that grow wild on Long Island, New York.

President	Eric Lamont
Vice President	Chris Mangels
Treasurer	Carol Johnston
Recrd Sec'y	Barbara Conolly
Cor'sp Sec'y	Jane Blanchard
Local Flora	Skip Blanchard
Field Trip	Al Lindberg
Membership	Lois Lindberg
Conservation	Louise Harrison
	John Turner
Hospitality	Nancy Smith
	Joanne Tow
Program	Eric Lamont
Editor	Steven Clements

Membership

Membership is open to all, and we welcome any new members. Annual dues are \$10. For membership, make your check payable to LONG ISLAND BOTANICAL SOCIETY and mail to: Lois Lindberg, Membership chairperson, Welwyn Preserve, Crescent Beach Road, Great Neck, NY 11542.



LIBS LOGO?

Above is a proposed LOGO for the Long Island Botanical Society submitted by Eric Lamont. Please let us know what you think of it. Send comments to Eric Lamont, 586-H Sound Shore Road, Riverhead, NY 11901.

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